

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATERSHED MANAGEMENT

PROPOSED AMENDMENT TO THE
MERCER COUNTY WATER QUALITY MANAGEMENT PLAN,
NORTHEAST WATER QUALITY MANAGEMENT PLAN,
UPPER DELAWARE WATER QUALITY MANAGEMENT PLAN
UPPER RARITAN WATER QUALITY MANAGEMENT PLAN AND
SUSSEX COUNTY WATER QUALITY MANAGEMENT PLAN,

TO ESTABLISH 28 TMDLs FOR FECAL COLIFORM FOR STREAM
SEGMENTS THAT EXTEND INTO HUNTERDON, MERCER, MORRIS,
PASSAIC, SUSSEX AND WARREN COUNTIES, AS LISTED IN TABLE 1.

Public Notice

Take notice that the New Jersey Department of Environmental Protection (Department) is seeking public comment on proposed amendments to the Mercer County Water Quality Management Plan (WQMP), Northeast WQMP, Upper Delaware WQMP, Upper Raritan WQMP, and Sussex County WQMP. These amendments would establish 28 TMDLs for fecal coliform for stream segments that extend into Hunterdon, Mercer, Morris, Passaic, Sussex, and Warren Counties, as listed in Table 1.

Background

A TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point and nonpoint source of pollutants of concern, natural background and surface water withdrawals. A TMDL quantifies the amount of a pollutant a water body can assimilate without violating a state's water quality standards and allocates that load capacity to known point sources in the form of wasteload allocations (WLAs), nonpoint sources in the form of load allocations

(LAs), and, as applicable, reserve capacity and a margin of safety. A TMDL is developed as a mechanism for identifying all the contributors to surface water quality impacts and setting goals for load reductions for pollutants of concern as necessary to meet surface water quality standards (SWQS). TMDLs are required, under Section 303(d) of the Federal Clean Water Act, 33 U.S.C. 1313(d), to be developed for waterbodies that cannot meet water quality standards after the implementation of technology-based effluent limitations. TMDLs may also be established to help maintain or improve water quality in waters that are not impaired. Federal regulations concerning TMDLs are contained in EPA's Water Quality Planning and Management Regulations (40 CFR 130).

On September 16, 2002, the New Jersey Department of Environmental Protection (Department) and USEPA Region 2 entered into a Memorandum of Agreement (MOA), which superseded the previous MOA between the Department and EPA. Under the September 16, 2002 MOA, TMDLs for at least 25 eutrophic lakes and 100 pathogen-impaired streams are scheduled to be established by June 30, 2003. This amendment would establish 28 of the 100 required TMDLs for pathogen-impaired streams.

Each TMDL must be proposed and adopted by the Department as an amendment to the appropriate area-wide WQMP(s) in accordance with N.J.A.C. 7:15-3.4(g).

Amendment to establish 28 fecal coliform TMDLs to address impaired streams

The State of New Jersey's *2002 Integrated List of Waterbodies* (35 N.J.R. 470 (a), January 21, 2003), identifies several waterbodies in the Northwest Water Region as being impaired by pathogens, as evidenced by the presence of high fecal coliform concentrations. The proposed amendment would establish 28 TMDLs addressing fecal coliform loads to the waterbodies identified in Table 1.

Table 1 Fecal coliform-impaired stream segments in the Northwest Water Region, identified in Category 5 of the 2002 Integrated List of Waterbodies, for which fecal coliform TMDLs are being established.

TMDL Number	WMA	Station Name/Waterbody	County(s)
1	1	Dry Brook at Rt 519 near Branchville	Sussex
2	1	Paulins Kill at Balesville	Sussex
3	1	Paulins Kill at Blairstown	Sussex Warren
4	1	Jacksonburg Creek near Blairstown	Sussex Warren
5	1	Pequest River at Rt206 Below Springdale	Sussex
6	1	Pequest River at Pequest	Sussex Warren
7	1	Pequest River at Belvidere	Sussex Warren
8	1	Pohatcong Creek at New Village	Sussex Warren
9	1	Musconetcong River at Beattystown	Sussex Warren Morris
10	1	Musconetcong River near Bloomsbury	Sussex Warren Hunterdon
11	1	Musconetcong River at Riegelsville	Sussex Warren
12	2	WallKill River At Sparta	Sussex
13	2	WallKill River at Scott Rd. at Franklin	Sussex
14	2	Wallkill River near Sussex	Sussex
15	2	Papakating Creek near Wykertown	Sussex
16	2	Papakating Creek at Pelletown	Sussex
17	2	WB Papakating Creek at McCoys Corner	Sussex
18	2	Papakating Creek near Sussex	Sussex
19	2	Papakating Creek at Sussex	Sussex
20	2	Wallkill River near Unionville	Sussex
21	2	Double Kill at Waywayanda	Sussex Passaic
22	2	Black Creek Nr Vernon	Sussex
23	11	Nishisakawick Creek Near Frenchtown	Hunterdon
24	11	Copper Creek Near Frenchtown	Hunterdon
25	11	Plum Brook near Locktown	Hunterdon
26	11	Jacobs Creek at Bear Tavern	Mercer
27	11	Miry Run at Route 533 at Mercerville	Mercer
28	11	Assunpink Creek at Peace Street at Trenton	Mercer

These twenty eight TMDLs will serve as management approaches or restoration plans aimed at identifying the sources of fecal coliform and for setting goals for fecal coliform load reductions in order to attain applicable surface water quality standards (SWQS).

As stated in N.J.A.C. 7:9B-1.14(c) of the New Jersey Surface Water Quality Standards for FW2 waters, "Fecal coliform levels shall not exceed a geometric average of 200/100 ml nor should more than 10 percent of the total samples

taken during any 30-day period exceed 400/100 ml.” Nonpoint and stormwater sources are the primary contributor to fecal coliform loads in these streams and can include storm-driven loads transporting fecal coliform from sources such as geese, farms, and domestic pets to the receiving water. Nonpoint sources also include steady-inputs from sources such as failing sewage conveyance systems and failing or inappropriately located septic systems. Because the total source contribution from sewage treatment plants is an insignificant fraction of the total load, these fecal coliform TMDLs will not impose any change in current practices for Sewage Treatment Plants and will not result in wasteload allocations or changes to existing effluent limits for these facilities.

Using ambient water quality data, summer and year-round geometric means were determined for each waterbody segment in the Northwest water region included on Sublist 5 of the 2002 Integrated List of Waterbodies (also known as the 303 (d) list) based on water quality monitoring conducted during the water years 1994-2000. Given the two-part surface water quality criteria of 200 CFU/100 ml and 400 CFU/100 ml applicable to fecal coliform in FW2 waters, computations were necessary for both criteria, which resulted in two values for percent reduction for each stream segment. In order to assure compliance with the SWQS, the higher (more stringent) percent reduction value was selected as the TMDL and will be applied to nonpoint and stormwater sources as a whole.

The TMDL report provides extensive information to assist with more specific identification of sources. Load duration curves, which are useful in identifying and differentiating between storm-driven and steady-input sources, are provided for stream segments for which streamflow gauge information is available. The Department, in collaboration with the local Public Advisory and Technical Advisory Committees, narrowed the primary sources of fecal coliform contamination to these waterbody segments to the following:

Non-Human Sources of Fecal Coliform

- Canada geese, pest waterfowl and other wildlife

- Pet Waste
- Stormwater basins which can act as accumulation points of fecal matter (from pets, waterfowl and wildlife)
- Direct stormwater discharges to waterbodies
- Farms, zoos

Human Sources of Fecal Coliform

- Malfunctioning or older improperly sized septic systems
- Failing Sewerage Conveyance Systems
- Improper garbage storage and disposal

In addition, other potential sources of fecal contamination specific to each stream segment are identified in the TMDL report. When bacterial sources are adequately identified, Best Management Practices (BMPs) specified in the TMDL Report for each source category will be applied to reduce bacterial loading to meet the SWQS. When bacterial sources are not easily identifiable, the TMDL requires bacterial source tracking (advanced chemical, biochemical and molecular monitoring methods) to be used in conjunction with the resulting percent load reduction and load duration curves to further identify pathogen sources.

TMDL's include both short-term and long-term management strategies. Short-term management strategies include existing projects funded by the Department to address fecal impairments to an impaired waterbody. These projects for the most part include stream bank restoration projects, stormwater retrofits, implementation of BMPs and monitoring. Nonpoint Source Pollution Control and Management Implementation Grants have been awarded by the Department since 1995 to local and regional organizations for projects that implement management practices for nonpoint source control.

While short-term management measures will begin to reduce sources of fecal coliform in the Northwest Water Region, additional measures will be needed to verify and further reduce or eliminate these sources. Long-term management strategies are provided for each source category. Long-term strategies include, for instance, the development of Stormwater Management Plans and Canada Goose Damage Management Plans.

The proposed amendment consists of a detailed report that provides the technical and regulatory basis for these TMDLs, and is available from the Department as described below.

Public Comment Information

This notice is being given to inform the public that a plan amendment has been proposed for the Mercer County WQMP, Northeast WQMP, Upper Delaware WQMP, Upper Raritan WQMP and Sussex County WQMP. All information related to this proposed amendment is located at the Department, Division of Watershed Management, PO Box 418, 401 East State Street, Trenton, New Jersey 08625-0418. If you wish to receive a copy of the draft TMDL that establishes 28 fecal coliform TMDLs, call the Division of Watershed Management at (609) 633-1441 or download the files from:

<http://www.state.nj.us/dep/watershedmgt/publications.htm>. The Department's file is available for inspection between 8:30 a.m. and 4:00 p.m., Monday through Friday. An appointment to inspect the documents may be arranged by calling the Division of Watershed Management at (609) 633-3812. Additional copies of the amendments may be also obtained by calling this number. An electronic copy of the TMDL Report may be requested via electronic mail sent to: H20SHED@dep.state.nj.us.

Interested persons should submit written comments on the proposed amendment to Barbara Hirst, Bureau Chief, New Jersey Department of Environmental

Protection, Division of Watershed Management, P.O. Box 418, 401 East State Street, Trenton, New Jersey, 08625. All comments must be submitted within 15 days following the public hearing noted below. The Department shall consider all comments submitted prior to the close of the comment period in reviewing the proposed amendment.

The Department requests that commenters who have access to current word processing software additionally submit comments on this proposed amendment electronically using a 3½-inch diskette mailed to the address above or via electronic mail sent to the Department at H20SHED@dep.state.nj.us. The preferred word processing software for submitting comments is Microsoft Word for Windows 97. Any commenter who wishes to use other software is encouraged to contact Ms. Hirst to check for compatibility (609-633-1441). MacIntosh formats should not be used. Submission of a diskette or via electronic mail in addition to written comment is not required.

The Department is holding a public hearing on the proposed amendments at the following time and place:

Date: May 22, 2003
Time: 7:00 pm. The public hearing will be held until 9:00 pm or the end of testimony, whichever is earliest.
Location: Pequest Trout Hatchery
605 Pequest Road
Oxford, New Jersey 07863

Lawrence J. Baier, Director
Division of Watershed Management
Department of Environmental Protection

Date

